

Patent Claims

1. A voltaic element comprising at least one lithium intercalating electrode and a housing consisting of flexible film material through which diverters connected to the positive and negative electrodes of the element are conducted to the exterior, characterized in that the diverter connected to the collector of the negative electrode and conducted to the exterior consists of nickel-coated copper foil.

2. Voltaic element comprising at least one lithium intercalating electrode and a housing consisting of flexible film material through which diverters connected to the positive and negative electrodes of the element and connected to safety electronics are conducted to the exterior, characterized in that at least one of the diverters which connect element and safety electronics consists of nickel-coated copper foil.

3. The voltaic element as claimed in claim 2, characterized in that a further protective element, particularly a PTC resistor, is inserted in the link between element and safety electronics.

4. The voltaic element as claimed in claim 2, characterized in that a further protective element, particularly a thermal fuse, is inserted in the link between element and safety electronics.

5. The voltaic element as claimed in one of claims 1 to 4, characterized in that the copper foil is voltaically nickel plated.

6. The voltaic element as claimed in one of claims 1 to 5, characterized in that the nickel-coated copper

diverters are 2 mm to 15 mm, preferably 3 mm to 5 mm wide.

5 7. The voltaic element as claimed in one of claims 1 to 6, characterized in that the nickel-coated copper diverters are 20  $\mu\text{m}$  to 200  $\mu\text{m}$ , preferably 50  $\mu\text{m}$  to 100  $\mu\text{m}$  thick.

10 8. The voltaic element as claimed in one of claims 1 to 7, characterized in that the layer thickness of the nickel is 10 nm to 3  $\mu\text{m}$ , preferably 50 nm to 500 nm.

15 9. The voltaic element as claimed in one of claims 1 to 8, characterized in that the housing of the element consists of compound aluminum/plastic film.